

REMARKS

Applicant files herewith the petition and fee for extension of time.

Applicant thanks the Examiner for the acceptance of the drawings, and for acknowledging the claim for priority and receipt of the priority document.

Applicant also thanks the Examiner for considering the references submitted with the IDS filed on May 12, 2005. A second IDS was filed on October 27, 2005. Applicant requests that the Examiner acknowledge consideration of the October 27, 2005 IDS in the next written communication from the Office.

The Examiner has objected to the drawings. The Examiner alleges that “the bar shaped electrodes, as recited in claims 8-11” are not shown in the drawings. The applicant respectfully traverses this drawing objection and requests that the Examiner withdraw the objection for the following reasons.

The bar shaped electrodes are already depicted in FIG. 2. Moreover, at page 4, lines 1-3, and page 6, lines 6-20 of the specification, a bar-shaped electrode 3 used in the cold cathode lamp is described with referring to FIG. 2. Therefore, the drawing objection is inappropriate and should be withdrawn.

Claims 1-26 have been examined. These claims have been objected to on formal grounds, rejected under 35 USC § 112 (second paragraph) and on reference grounds. While the claim rejections are respectfully traversed the examined claims have been cancelled with disclaimer or prejudice and replaced with new claims 27 - 35. It is submitted that the new claims patentably distinguish over the prior art for the following reasons.

A feature of new claim 27 is that the cold cathode lamp having bar-shaped electrodes with at least a surface of the electrodes including a nitride. The nitride includes at least one of

hafnium (Hf), niobium (Nb) and tantalum (Ta). Moreover, a feature of the new claim 30 is that the cold cathode lamp has tubular electrodes with at least a surface of the electrodes including a nitride. The nitride includes at least one of titanium (Ti), zirconium (Zr), hafnium (Hf), niobium (Nb) and tantalum (Ta). Furthermore, a feature of the new claim 33 is that the cold cathode lamp has cup-shaped electrodes with at least a surface of the electrodes including a nitride. The nitride includes at least one of titanium (Ti), zirconium (Zr), hafnium (Hf), niobium (Nb) and tantalum (Ta). It is respectfully submitted that the prior art does not disclose or suggest the claimed combination of independent claims 27, 30 or 33. As claims 28-29 depend from claim 27, claims 31-32 from claim 30 and claims 34-35 from claim 33, these claims also patentably distinguish over the prior art for the reasons given below.

Heuvelmans et al. (USPN 5,841,222) relates to a low-pressure discharge lamp having coil shaped electrodes and covering of protective material including nitrides of one metal selected from the group of titanium, zirconium, hafnium, niobium, tantalum (see column 2, lines 25-32). The discharge lamp disclosed by Heuvelmans et al. is operated by heating the electrode to emit the electrons from the electron emitting material. Therefore, the discharge lamp taught by the reference is not a cold cathode lamp based on a glow discharge, but a hot cathode lamp based on an arc discharge. Accordingly, Heuvelmans et al. neither teach nor suggest a cold cathode lamp having electrodes having specific shape and made up of the material as set forth in claim 27, 30 or 33.

Siegle (USPN 3,656,657) relates to a pre-ignition gap used in ignition systems for combustion engines (see column 1, lines 8-13). Therefore, Siegle neither teaches nor suggests a cold cathode lamp of high luminance and long life, having above described feature.


Hamada et al. (USPN 6,172,453) relates to discharge lamp cylinder electrodes 27 and anti-sputtering coating utilizing ZrN, NbN, TaN or HfN (see column 13, lines 34-65). However, Hamada et al. neither teach nor suggest a cold cathode lamp having electrodes with specific shape and made up of the material as claimed in claim 27, 30 or 33.

To the contrary, new claims 27, 30 and 33 respectively have the new features explained above, not disclosed or suggested by the cited references. Therefore, new claims 27, 30 and 33 are patentable over the cited references. Moreover, the new dependent claims 28, 29, 31, 32, 34 and 35 are also patentable over the cited references at least for the reason given above and by way of the additional limitations set forth therein.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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